



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agricultural Experiment Station
Auburn University

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (PLANT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

MUSKMELON

'Chilton'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 20th day of October in the year of our Lord one thousand nine hundred and seventy-seven

Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION Chilton	2. KIND NAME Muskmelon	FOR OFFICIAL USE ONLY	
		PV NUMBER 73072	
3. GENUS AND SPECIES NAME Cucumis melo	4. FAMILY NAME (Botanical) Cucurbitaceae	FILING DATE 3-9-73	TIME 8:30 A.M.
	5. DATE OF DETERMINATION 4-1-72	FEE RECEIVED \$ 250.00	BALANCE DUE \$ 3-9-73
		\$ 250.00	\$ 4-29-77
		\$ 250.00	\$ 9-9-77
6. NAME OF APPLICANT(S) Dept. of Horticulture Auburn University Agr. Exp. Sta.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Auburn University Auburn, Alabama 36830	8. TELEPHONE AREA CODE AND NUMBER 205 826-4862	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) State Univ. Agr. Exp. Sta.		10. STATE OF INCORPORATION Alabama	11. DATE OF INCORPORATION 1872

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

**D. Y. Perkins, Head, Department of Horticulture Auburn University, Auburn, Alabama
36830**

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)☒ 13B. Exhibit B, Botanical Description of the Variety☒ 13C. Exhibit C, Objective Description of the Variety☒ 13D. Exhibit D, Data Indicative of Novelty☒ 13E. Exhibit E, Statement of the Basis of Applicant's Ownership14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☒ NO14C. If "Yes," to 14B, how many generations of production beyond breeder seed? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

8/9/73
(DATE)
8-9-73
(DATE)

Donald Y. Perkins
(SIGNATURE OF APPLICANT)
D. Y. Perkins, Head, Dept. of Horticulture
Joseph D. Norton
(SIGNATURE OF APPLICANT)
J. D. Norton, Professor, Breeder 00001

Exhibit AOrigin and History of the Chilton Variety

1. 'Chilton' is an inbred line from the cross Southland x P.I. 140471 as shown in the pedigree (see attached leaflet No. 84, Auburn Univ. Agr. Exp. Sta., Chilton - A High Quality Fruit for the Commercial Market). Following the cross, a backcrossing and disease screening program was followed with selection of disease resistant seedlings and high quality fruit. Thus, Chilton originated from a program of backcrossing and inbreeding to obtain resistance to gummy stem blight (Mycosphaerella citrullina, downy mildew (Pseudoperonospora cubensis), and powdery mildew (Sphaerotheca fuliginea).

2. Pure line selections were made in progeny from the third backcross based on disease resistance and fruit quality. Yield tests were made at five locations in Alabama and 22 locations in the Southern Region for four years (See attached leaflet No. 84).

3. The genetic makeup of the variety was stabilized in the fifth generation. (see attached leaflet No. 84).

1. Name : Chilton

2. Botanical Description of Variety

Plant: The vine is trailing with hirsute stems; leaves shallowly fine lobed with the lobes more or less rounded at the apex. Upper leaf surface grayish green 1 GY 3/2 ^{1/}. Lower leaf surface, scabrous, moderate olive green 2.5 GY 4/3. Mature leaf length 5 inches, width 5 inches.

Flower: Flowers staminate, pistillate and perfect. Pistillate and perfect flowers emerge 10 to 14 days after first staminate flowers appear. Staminate flowers length 0.5 inch, width 1.0 inch; pistillate and perfect flowers length 2.0 inches, width 1.0 inch. Petal color vivid yellow 2.5 Y 8/12.

Fruit Exterior: Fruit mostly round some round oval; slightly ribbed with an extra heavy medium net. Fruit firm; weight 2½ pounds; size 5-6 inches diameter. Color dark orange yellow 10 YR 5/6. Rind thickness 0.5 inch.

Fruit Interior: Flesh melting, tender juicy, sweet (12.92 soluble solids), excellent delicious flavor; thickness 1 3/4 - 2 inches. Typically 3 locules, 115 - 125 seeds per locule.

1/ Nickerson color fan, maximum chroma, 40 hues, Nickerson Color Company, Inc.

2/ Baush and Lomb Refractometer 0 - 25 scale.

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EXHIBIT D

VARIETY MOST SIMILAR TO 'CHILTON' AND HOW THESE VARIETIES DIFFER

1. Similarities:

The 'Chilton' variety is most similar to the 'Gulfstream' variety. These similarities in plant vigor, fruit shape, rind color, flesh aroma, flesh flavor, and flesh color are described in "Muskmelon Application No. 73072, 'Chilton'", Exhibit B, Botanical Description of Variety. Both varieties produce high yields of high quality fruit as indicated in the release publications (a, c).

2. Differences:

'Chilton' differs from 'Gulfstream' in total soluble solids, yield and weight of fruit (c). The netting thoroughly covers the entire fruit including both ribs and sutures of 'Chilton'; however, the netting is not extensive on the sutures of 'Gulfstream'. The leaf surfaces of 'Chilton' are scabrous; 'Gulfstream' leaf surfaces are pubescent (a, b, c).

3. Information Cited and Attached

- a. Norton, Joseph D. 1972. Chilton, A High Quality Fruit for the Commercial Market. Auburn University Agr. Exp. Sta. Cir. 84.
- b. Norton, Joseph D. 1973. Muskmelon Application No. 73072, 'Chilton', Exhibit B, Botanical Description of Variety.
- c. Norton, Joseph D., H. M. Bryce, C. C. Carlton, K. C. Short, J. E. Barrett, M. H. Hollingsworth, and C. A. Brogden. 1976. New Cantaloupes Suited for Commercial Production. Auburn University Agr. Exp. Sta. Highlights of Agr. Res. Vol. 23, No. 4.

Exhibit E

Statement of Applicants Ownership of 'Chilton' Variety

The Department of Horticulture, Auburn University Agricultural Experiment Station, Auburn University, Auburn, Alabama believes it is the sole original and first breeder of the Chilton variety of Muskmelon for which it solicits a certificate of protection.

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INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

FORM GR-470-38
(6-76)

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
BELTSVILLE, MARYLAND 20705
OBJECTIVE DESCRIPTION OF VARIETY
Muskmelon. (Cucumis melo L.)

NAME OF APPLICANT(S) D. Y. Perkins	VARIETY NAME OR TEMPORARY DESIGNATION Chilton
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) Department of Horticulture, Auburn University Auburn, Alabama 36830	FOR OFFICIAL USE ONLY PVPO NUMBER 73072

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. or) when number is either 99 or less.

1. TYPE:

<input type="text" value="5"/>	1 = PERSIAN	2 = HONEY DEW	3 = CASABA	4 = CRENSHAW	5 = COMMON OR SUMMER
	6 = OTHER _____				

2. AREA OF BEST ADAPTATION IN U.S.A.

<input type="text" value="1"/>	1 = SOUTHEAST	2 = NORTHEAST/NORTHCENTRAL	3 = SOUTHWEST	4 = MOST AREAS
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3. MATURITY (FROM SEEDING TO HARVEST):

<input type="text" value="0"/> <input type="text" value="7"/> <input type="text" value="5"/>	DAYS	<input type="text" value="3"/>	1 = FORDHOOK GEM (EARLY)
<input type="text" value="1"/> <input type="text" value="4"/>	NO. DAYS EARLIER THAN	<input type="text" value="2"/>	2 = DELICIOUS 51 (MIDSEASON)
<input type="text" value="0"/> <input type="text" value="2"/>	NO. DAYS LATER THAN	<input type="text" value="4"/>	3 = HONEY DEW (LATE)
			4 = OTHER (Specify) <u>Hales Best</u>

4. PLANT:

<input type="text" value="1"/>	1 = ANDROMONOECIOUS	2 = MONOECIOUS	3 = GYNOECIOUS	4 = OTHER _____
<input type="text" value="1"/>	1 = VINE	2 = SEMI-BUSH	3 = BUSH	

5. LEAF (MATURE BLADE OF THIRD LEAF)

<input type="text" value="1"/>	SHAPE:	1 = ORBICULAR	2 = OVATE	3 = RENIFORM
<input type="text" value="2"/>		1 = NOT LOBED	2 = SHALLOWLY LOBED	3 = DEEPLY LOBED
<input type="text" value="3"/>		1 = LIGHT GREEN (HONEY DEW)	2 = MEDIUM GREEN	3 = DK. GREEN (RIO GOLD)
<input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="7"/>	mm LENGTH	<input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="7"/>	mm WIDTH	
<input type="text" value="3"/>	SURFACE:	1 = PUBESCENT	2 = GLABROUS	3 = SCABROUS

6. FRUIT (AT EDIBLE MATURITY):

<input type="text" value="1"/> <input type="text" value="3"/>	cm LENGTH	<input type="text" value="1"/> <input type="text" value="3"/>	cm DIAMETER	<input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="3"/> <input type="text" value="5"/>	gm WEIGHT
<input type="text" value="3"/>	SHAPE:	1 = OBLATE	2 = OVAL	3 = ROUND	4 = ELONGATE-CYLINDRICAL
<input type="text" value="2"/>	SURFACE:	1 = SMOOTH	2 = NETTED	3 = CORRUGATED	4 = WARTED
<input type="text" value="2"/>	BLOSSOM SCAR:	1 = OBSCURE	2 = CONSPICUOUS		
<input type="text" value="2"/>	RIBS:	1 = ABSENT	2 = PRESENT		
<input type="text" value="0"/> <input type="text" value="9"/>	NO. RIBS PER FRUIT	<input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="0"/>	mm RIB WIDTH AT MEDIAL	<input type="text" value="2"/>	RIBS: 1 = SMOOTH 2 = NETTED

SUTURES:

<input type="text" value="1"/>	1 = SHALLOW (GOLDEN DELIGHT)	2 = MEDIUM	3 = DEEP (HACKENSACK)
<input type="text" value="2"/>	1 = SMOOTH	2 = NETTED	
<input type="text" value="3"/>	SHIPPING QUALITY:	1 = POOR (HOME GARDEN)	2 = FAIR (SHORT DISTANCE SHIPPING)
		3 = EXCELLENT (LONG DISTANCE SHIPPING)	

<input type="text" value="1"/>	FRUIT ABSCISE:	1 = WHEN RIPE	2 = WHEN OVERRIPE	3 = DO NOT ABSCISS
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7. RIND NET:

3 1 = ABSENT 2 = SPARSE 3 = ABUNDANT

2 DISTRIBUTION: 1 = SPOTTY 2 = COVERS ENTIRE FRUIT

2 COARSENESS: 1 = FINE 2 = MEDIUM COARSE 3 = VERY COARSE

3 INTERLACING: 1 = NONE 2 = SOME 3 = COMPLETE

1 INTERSTICES: 1 = SHALLOW 2 = MEDIUM DEEP 3 = DEEP

8. RIND TEXTURE:

3 1 = SOFT 2 = FIRM 3 = HARD

2 5 mm THICKNESS AT MEDIAL

9. RIND COLOR (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW 0 2 0 4)

01 = WHITE 02 = CREAM 03 = BUFF 04 = YELLOW 05 = GOLD 06 = GREEN 07 = ORANGE 08 = BRONZE
09 = BROWN 10 = GRAY 11 = BLACK 12 = OTHER (Specify) None

0	4	0	7	PRIMARY COLOR	0	0	1	2	MOTTLING COLOR
0	0	1	0	NET COLOR	0	4	0	7	FURROW (SUTURE) COLOR

RIND COLOR (AT FULL MATURITY)

0	0	0	7	PRIMARY COLOR	0	0	1	2	MOTTLING COLOR
0	0	1	0	NET COLOR	0	0	0	7	FURROW (SUTURE) COLOR

10. FLESH (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW 2 3)

1 = WHITE 2 = CREAM 3 = YELLOW 4 = GREEN 5 = ORANGE 6 = SALMON 7 = PINK
8 = OTHER (Specify)

0	5	COLOR NEAR CAVITY	0	5	COLOR IN CENTER	0	5	COLOR NEAR RIND
1	3	REFRACTOMETER % SOLUABLE SOLIDS (CENTER OF FLESH)						
0	7	% SOLUABLE SOLIDS FOR CHECK VARIETY (Specify variety) <u>Hales Best</u>						
2	AROMA: 1 = ABSENT 2 = FAINT 3 = STRONG							
2	FLAVOR: 1 = MILD 2 = SOMEWHAT SPICY 3 = VERY SPICY							

11. SEED CAVITY:

5	1	mm LENGTH	5	1	mm WIDTH
1	SHAPE IN X-SECTION: 1 = CIRCULAR 2 = TRIANGULAR				

12. SEEDS:

3	7	5	NO. PER FRUIT	2	3	6	gm PER 1,000
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13. DISEASE RESISTANCE * (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

0	BACTERIAL WILT	0	ROOT ROT	0	CROWN BLIGHT	0	MELON RUST
2	POWDERY MILDEW	0	VERTICILLUM WILT	0	SULPHUR BURN	0	SCAB
0	WATERMELON MOSAIC	2	DOWNY MILDEW	0	FUSARIUM WILT	2	ROOT KNOT (NEMATODE)
0	ANTHRACNOSE	0	CUCUMBER MOSAIC	0	SQUASH MOSAIC	0	OTHER
				2	OTHER <u>Gummy Stem Blight</u>	0	OTHER

* STATE GENUS, SPECIES, AND RACES WHEN KNOWN, UNDER ITEM 16.

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14. INSECT RESISTANCE: (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

<input type="text" value="0"/>	APHID	<input type="text" value="0"/>	PICKLE WORM	<input type="text" value="0"/>	DARKLING GROUND-BEETLE	<input type="text" value="0"/>	BANDED CUCUMBER BEETLE
<input type="text" value="0"/>	MITE	<input type="text" value="0"/>	WESTERN SPOTTED CUCUMBER BEETLE	<input type="text" value="0"/>	MELON LEAFHOPPER	<input type="text" value=""/>	OTHER (Specify)
<input type="text" value="0"/>	MELON WORM	<input type="text" value="0"/>	WESTERN STRIPED CUCUMBER BEETLE	<input type="text" value="0"/>	MELON LEAFMINER		

15. NAME A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED FOR THE FOLLOWING CHARACTERISTICS:

CHARACTER	VARIETY	CHARACTER	VARIETY
DAYS MATURITY	Hales Best	FRUIT SHAPE	Gulfstream
PLANT VIGOR	Gulfstream	RIND COLOR	Gulfstream
PLANT HABIT	PMR #45	FLESH AROMA	Gulfstream
FRUIT NETTING	PMR #45	FLESH FLAVOR	Gulfstream
FRUIT SIZE	PMR #45	FLESH COLOR	Gulfstream

16. ADDITIONAL INFORMATION AND COMMENTS:

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